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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,778	11/26/2003	Henry DaCosta	IMM174	4196
34300 7590 05/30/2007 PATENT DEPARTMENT (51851) KILPATRICK STOCKTON LLP 1001 WEST FOURTH STREET WINSTON-SALEM, NC 27101			EXAMINER LIANG, REGINA	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,778	Applicant(s) DACOSTA ET AL.	
	Examiner Regina Liang	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/3/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/27/07 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

3. The disclosure is objected to because of the following informalities: the language "various other forms of commuter-readable media may transmit or carry instructions to a computer, including a router, private or public network, or other transmission device or channel, both wired and wireless" is confusing and awkward as to how does a media transmit instructions to a computer when it is well known a computer readable media does not have any transmit capability.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2629

5. Claims 19-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 19-28 are rejected under 35 U.S.C. 101 as being non-statutory because claims 19-28 although claim a computer-readable medium on which is encoded programming code, however, page 8, [0020] of the specification discloses "various other forms of commuter-readable media may transmit or carry instructions to a computer, including a router, private or public network, or other transmission device or channel, both wired and wireless", in light of the specification, the medium as claimed include that of a signal. As set forth in the Interim Guidelines, page 55, "A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine". Therefore, claims 19-28 are non-statutory.

Claim Rejections - 35 USC § 102

6. Claims 1-3, 5-17, 19-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillespie et al. (US Patent No. 5,880,411)

As to claims 1, 19, Gillespie discloses a method comprising: determining an adaptive pressure threshold value based at least in part on user activity ("the threshold may be adjusted to suit the tastes of the individual user", col. 23, lines 29-32); receiving a pressure signal (e.g. Z-value, Fig. 1) indicating a pressure from an input device (e.g. finger); comparing the pressure signal to an adaptive pressure threshold value (302, 320, Fig. 17A); and outputting a signal if the pressure signal is greater than the adaptive pressure threshold value (see Fig. 17A).

As to claim 2, Gillespie discloses adaptive pressure threshold value (Z_{TH}) is associated with an absolute pressure threshold.

As to claim 3, Gillespie discloses adaptive pressure threshold value is associated with a position received from the input device (e.g. the Z-values is derived from the position signals X and Y).

As to claim 5, Gillespie discloses the adaptive pressure threshold value is associated with a user identifier (col. 23, lines 31-32).

As to claims 6, 16, 20, 26, Gillespie discloses the adaptive pressure threshold value comprises a first pressure threshold value, and further comprising: comparing the pressure signal to a second pressure threshold value; and outputting the signal if the pressure signal is greater than both the first pressure threshold value and the second pressure threshold value (col. 24, lines 20-60).

As to claim 7, Gillespie discloses the pressure signal comprises a pseudo pressure signal (e.g. the pressure value is varied in accordance with the capacitance value).

As to claim 8, Gillespie discloses supplying a pressure filter (48-1...48-n, Fig. 3) to the pressure signal to create a filtered pressure signal.

As to claims 9-11, 17, 21-22, 27, Gillespie discloses the pressure filter comprises a first pressure filter comprising a first attribute (e.g. high frequency, col. 13, lines 34-44), and further comprising applying a second pressure filter to the pressure signal, the second pressure filter comprising a second attribute (e.g. low frequency, col. 15, line 55) that is different than the first attribute.

As to claims 12, 23, Gillespie discloses applying the pressure filter comprises applying the pressure filter utilizing a sliding window (col. 28, lines 47-58).

As to claim 13, Gillespie discloses the input device comprises a touch pad (10, Fig. 1).

As to claims 14, 24, Gillespie discloses calculating a first value associated with the speed of movement across the input device; comparing the first value to a speed threshold value; and outputting the signal if the first value is less than the speed threshold value (see 362, Fig. 17D).

As to claims 15, 25, Gillespie discloses applying a speed filter to the first value before comparing the speed to the speed threshold value (col. 36, lines 26-47).

Claim Rejections - 35 USC § 103

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie in view of Geaghan et al (US 2003/0063073 hereinafter Geaghan).

As to claim 4, Gillespie does not disclose the adaptive pressure threshold value can vary over time. However, Geaghan teaches the thresholds can be adjusted over time (lines 16-20 in [0040]). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gillespie to adjust the adaptive pressure threshold value over time as taught by Geaghan to distinguish valid touch inputs on a continuously updated basis.

8. Claims 18 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie in view of Fujita et al. (US Patent No. 6,118,435).

As to claims 18 and 28, it is noted that Gillespie does not specifically disclose outputting a signal associated with a haptic effect, the haptic effect based at least in part on the pressure signal. Fujita is cited to teach a touch panel device similar to Gillespie. Fujita further discloses a signal associated with a haptic effect, the haptic effect based at least in part on the pressure signal (see abstract and Fig. 2). It would have been obvious to one of ordinary skill in the art to have

Art Unit: 2629

modified Gillespie with the tactile force feedback as taught by Fujita so as to provide an interaction between the user and the computer.

Response to Arguments


9. Applicant's arguments filed 2/27/07 have been fully considered but they are not persuasive.

Applicant argues that Gillespie does not disclose "determining an adaptive pressure threshold value based at least in part on user activity" as recited in claims 1 and 19. This argument is not persuasive because Gillespie teaches "the threshold may be adjusted to suit the tastes of the individual user" (col. 23, lines 29-32). It is believed that the broadly claimed limitations are still met by Gillespie.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Regina Liang
Primary Examiner
Art Unit 2674

5/22/07